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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 5

Complete if Known

Application Number	09/393,998
Filing Date	September 8, 1999
First Named Inventor	Craig Culver
Art Unit	2629
Examiner Name	Boddie, William
Attorney Docket Number	IMM060.RE

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	1.	US- 4,712,101	12/8/1987	Culver	
	2.	US- 4,868,549	9-19-1989	Affinito et al.	
	3.	US- 5,004,391	4-2-1991	Burdea	
	4.	US- 5,450,079	9-12-1995	Dunaway	
	5.	US- 5,506,605	4-9-1996	Paley	
	6.	US- 5,631,669	5-20-1997	Stobbs et al.	
	7.	US- 5,691,898	11-25-1997	Rosenberg et al.	
	8.	US- 5,825,308	10-20-1998	Rosenberg	
	9.	US- 5,914,705	6-22-1999	Johnson et al.	
	10.	US- 5,956,016	9-21-1999	Kuenzner et al.	
	11.	US- 6,069,614	5-30-2000	Singhal	
	12.	US- 6,107,992	8-22-2000	Ishigaki	
	13.	US- 6,184,862	2-6-2001	Leiper	
	14.	US- 6,256,011	7-3-2001	Culver	
	15.	US- 6,300,936	10-9-2001	Braun et al.	
		US-			
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		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	16.	EP 0349086	1-3-1990	Stork Kwant B.V.		
	17.	JP 01-003664	7-19-1990	Taito Corp.		
	18.	JP 02-109714	1-13-1992	Epoch Co. and Key-Planning Co.		
	19.	JP 04-007371	8-3-1993	Taito Corp.		
	20.	JP 05-193862	1-27-1995	Sega Corp.		

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Sheet 2 of 5

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NON PATENT LITERATURE DOCUMENTS

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	21.	BAIGRIE, "Electric Control Loading - A Low Cost, High Performance Alternative," Proceedings, pp. 247-254, November 6-8, 1990.	
	22.	BROOKS et al., "Hand Controllers for Teleoperation - A State-of-the-Art Technology Survey and Evaluation," JPL Publication 85-11; NASA-CR-175890; N85-28559, pp. 1-84, 03/1/1985.	
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	25.	GOTOW et al., "Controlled Impedance Test Apparatus for Studying Human Interpretation of Kinesthetic Feedback," WA11-11:00, pp. 332-337, 1989.	
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	31.	TADROS, "Control System Design for a Three Degree of Freedom Virtual Environment Simulator Using Motor/Brake Pair Actuators", MIT Archive © Massachusetts Institute of Technology, pp. 1-88, February 1990.	

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	32.	ADELSTEIN, "A Virtual Environment System For The Study of Human Arm Tremor," Ph.D. Dissertation, Dept. of Mechanical Engineering, MIT, June 1989.	
	33.	BEJCZY, "Generalization of Bilateral Force-Reflecting Control of Manipulators," Proceedings Of Fourth CISM-IFTOMM, Sep. 8-12, 1981.	
	34.	BEJCZY, "Sensors, Controls, and Man-Machine Interface for Advanced Teleoperation," Science, Vol. 208, No. 4450, pp. 1327-1335, 1980.	
	35.	EBERHARDT et al., "OMAR - A Haptic display for speech perception by deaf and deaf-blind individuals," IEEE Virtual Reality Annual International Symposium, Seattle, WA, Sep. 18-22, 1993.	
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	45.	TERRY et al., "Tactile Feedback In A Computer Mouse," Proceedings of Fouteenth Annual Northeast Bioengineering Conference, University of New Hampshire, March 10-11, 1988.	

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Attorney Docket Number	IMM060RE

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	46.	"Cyberman Technical Specification," Logitech Cyberman SWIFT Supplement, 4/5/1994.	
	47.	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.	
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	52.	GOBEL et al., "Tactile Feedback Applied to Computer Mice," International Journal of Human-Computer Interaction, Vol. 7, No. 1, pp. 1-24, 1995.	
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	54.	MARCUS, "Touch Feedback in Surgery," Proceedings of Virtual Reality and Medicine The Cutting Edge, Sep. 8-11, 1994.	
	55.	OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95, Seoul, Korea, 21-24 August 1995.	
	56.	OUH-YOUNG, "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," IEEE Transactions on Consumer Electronics, Vol. 41, No. 3, August 1995.	
	57.	PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.	
	58.	SCANNELL, "Taking a Joystick Ride," Computer Currents, Boston Edition, Vol. 9, No. 11, November 1994	
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	60.	United States Patent and Trademark Office, Office Action, Application No. 09/875,458, mailed January 1, 2006.	
	61.	United States Patent and Trademark Office, Office Action, Application No. 09/875,458, mailed June 1, 2005.	
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	66.	United States Patent and Trademark Office, Office Action, Application No. 09/875,458, May 30, 2002.	
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